

AMENDMENTS TO THE CLAIMS**Claim 1 (cancelled)**

Claim 2 (currently amended): The method according to ~~plasto-elastomeric composition of~~ claim 1, wherein polyolefin is the product of the copolymerisation of olefinic monomers selected from ethylene, propylene, 1-butene, 1-pentene, 1-hexene, 4-methyl-1-pentene, 3-methyl-1-pentene, 3,3-dimethyl-1-butene, 3-methyl-1-hexene, and 2,4,4 trimethyle-1-pentene.

Claim 3 (currently amended): The method according to ~~composition of~~ claim 1, wherein the part to which fillers of ~~mineral origin~~ are not added contains between 10 and 90% of polyolefin and between 90 and 10% of a EPDM terpolymer.

Claim 4 (currently amended): The method according to ~~composition of~~ claim 2[[3]], wherein the EPDM terpolymer consists of at least two olefinic monomers and one dienic monomer conjugated or not conjugated in the main polymeric chain.

Claim 5 (cancelled)

Claim 6 (currently amended): The method according to ~~composition of~~ claim 3[[4]], wherein the dienic monomer is selected from ethylidene-norbornene, 1,4-hexadiene, dicyclopentadiene, 2-methyl-1,4-pentadiene, 1,4,9-decatriene, 1,5-cyclopentadiene, polybutene, polybutadiene and their derivatives.

Claim 7 (currently amended): The method according to ~~plasto-elastomeric composition of~~ claim 1, wherein the fillers are of mineral origin ~~are calcium carbonate CaCO_3 which may or may not be coated or uncoated, pure or impure, precipitated or non-precipitated calcium carbonate CaCO_3 not.~~

Claim 8 (currently amended): The ~~plasto-elastomeric composition according to~~ of claim 17[[7]], wherein the filler of mineral origin is calcium carbonate, the calcium carbonate having has a typical specific gravity of 2.71 g/cm^3 .

Claim 9 (currently amended): The ~~plasto-elastomeric composition according to~~ claim 17[[1]], wherein the ~~filler fillers~~ of mineral origin ~~is~~ are aluminium hydroxide – chemical formula $\text{Al}(\text{OH})_3$.

Claim 10 (currently amended): The ~~plasto-elastomeric composition according to~~ claim 9, wherein the aluminium hydroxide has a typical specific gravity of 2.42 g/cm^3 .

Claim 11 (currently amended): The ~~plasto-elastomeric composition according to~~ claim 17[[1]], wherein the ~~filler fillers~~ of mineral origin ~~is~~ are magnesium hydroxide – chemical formula $\text{Mg}(\text{OH})_2$.

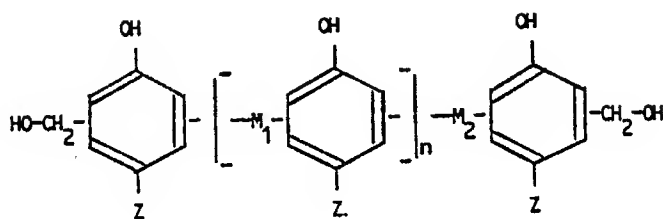
Claim 12 (currently amended): The ~~plasto-elastomeric composition according to~~ claim 17[[1]], wherein the ~~filler fillers~~ of mineral origin ~~is~~ are Barytes – chemical formula BaSO_4 .

Claim 13 (currently amended): The ~~plasto-elastomeric composition according to~~ claim 12, wherein the Barytes is a barium sulphate with different colours and has a typical specific gravity of 4.48 g/cm^3 .

Claim 14 (currently amended): The plasto-elastomeric composition of claim 9, wherein the ~~magnesium and/or aluminium hydroxide~~ is ~~are~~ present in quantities of up to 75%, ~~giving the product flame-proof characteristics.~~

Claim 15 (new): A method for producing a plasto-elastomeric composition, the method comprising the steps of:

providing a plasto-elastomeric composition having the elastomeric phase partially or fully cross-linked, wherein cross-linking is carried out by means of salicylic acid and an alkylphenol – formaldehyde non-halogenated phenolic resin of formula (I) :

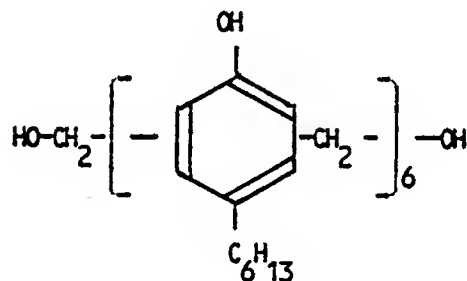


wherein M_1 and M_2 are $-CH_2-$ or $-CH_2-\overset{\overset{O}{||}}{C}-CH_2-$ radicals, which may be the same or different, Z is an alkenyl, acrylic or alkyl radical containing between 4 and 16 carbon atoms, and n is an integer between 0 and 6; and

adding at least one of a Calcium carbonate (coated and uncoated), aluminium hydroxide, magnesium hydroxide, and Barytes filler to the composition, directly in the compounding step with cross-linking or subsequently to the material that is already cross-linked, until the composition shows a total specific gravity of 2 kg/dm^3 and has a predetermined hardness;

wherein the composition comprises 0.1 to 0.8 parts by weight of salicylic acid for each part by weight of resin, and wherein the fillers are in a quantity which is 90% or less by weight of the composition.

Claim 16 (new): A method according to claim 1, characterised in that the phenolic resin is a phenol-formaldehyde type resol with the following formula (II):



(II)

Claim 17 (new): A plasto-elastomeric composition obtained by a method according to claim 1.

Claim 18 (new): The plasto-elastomeric composition of claim 11, wherein the magnesium hydroxide is present in quantities of up to 75%.